

METHOD AND APPARATUS FOR FACILITATING INSTANT FAILOVER DURING PACKET ROUTING

ABSTRACT

One embodiment of the present invention provides a system that facilitates instant failover during packet routing by employing a flooding protocol to send packets between a source and a destination. Upon receiving a packet containing data at an intermediate node located between the source and the destination, the system determines whether the packet has been seen before at the intermediate node. If not, the system forwards the packet to neighboring nodes of the intermediate node. In one embodiment of the present invention, forwarding the packet to neighboring nodes involves forwarding the packet to all neighboring nodes except the node from which the packet was received. In one embodiment of the present invention, determining whether the packet has been seen before involves examining a sequence number, S_R , contained within the packet to determine whether the sequence number has been seen before.